

CLAIMS

What is claimed is:

- 5 1. An isolated human HX2004-6 polypeptide.
2. The human HX2004-6 polypeptide of claim 1, comprising an amino acid sequence of SEQ ID NO:2.
- 10 3. The human HX2004-6 polypeptide of claim 1, which has an amino acid sequence of amino acids 1-342 of SEQ ID NO:2.
4. An isolated polynucleotide, or complement thereof, comprising a polynucleotide sequence encoding a human HX2004-6 polypeptide of claim 1.
- 15 5. The isolated polynucleotide sequence of claim 4 comprising a polynucleotide sequence of SEQ ID NO:1.
6. The isolated polynucleotide sequence of claim 4 having a polynucleotide sequence of nucleotides 1-1724 of SEQ ID NO:1.
7. An isolated polynucleotide sequence which hybridizes under stringent conditions to a polynucleotide having the sequence depicted in SEQ ID NO:1.
- 25 8. An isolated polynucleotide sequence which hybridizes under stringent conditions to a polynucleotide having the sequence of nucleotides 1-1724 of SEQ ID NO:1.

9. An isolated polynucleotide of claim 4, wherein said polynucleotide is overexpressed in an adenocarcinoma of a tissue selected from the group consisting of exocrine pancreas, breast, and colon.

5 10. A recombinant expression vector comprising the polynucleotide sequence of claim 4.

11. An isolated host cell comprising the polynucleotide sequence of claim 4.

12. A method for producing the human HX2004-6 polypeptide of claim 1, the method
10 comprising the steps of:

a) culturing a recombinant host cell containing a human HX2004-6 polypeptide-encoding polynucleotide sequence under conditions suitable for the expression of the polypeptide; and

b) recovering the polypeptide from the host cell culture.

15 13. An isolated antibody that specifically binds a human HX2004-6 polypeptide of claim
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14. A method for identifying a polynucleotide homologous to the polynucleotide of
20 claim 4, the method comprising the steps of:

contacting a polynucleotide probe with a test polynucleotide, the probe comprising at least 15 contiguous nucleotides of a polynucleotide sequence encoding a human HX2004-6 polypeptide; and

detecting hybridization of the probe with the test polynucleotide;

25 wherein detection of hybridization of the probe to the test polynucleotide indicates that the polynucleotide shares sequence homology with the human HX2004-6 polypeptide-encoding polynucleotide.

15. A method of detecting the presence of an HX2004-6 mRNA in a biological sample, comprising:
a) contacting the sample with an HX2004-6 polynucleotide; and
b) detecting hybridization.

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16. The method of claim 15, wherein the sample is ductal epithelial cells from a tissue selected from the group consisting of pancreas, colon, and breast.

10 17. The method of claim 15, further comprising, before step (a) the step of making a cDNA copy of the HX2004-6 mRNA.

18. A method for detecting the presence of an HX2004-6 polypeptide in a biological sample, comprising:

15 a) contacting the sample with an antibody specific for an HX2004-6 polypeptide; and
b) detecting specific binding of the antibody.

19. A method for identifying an agent that modulates HX2004-6 expression in a cell, the method comprising:

20 combining a candidate agent with a cell comprising a nucleic acid encoding a human HX2004-6 polypeptide; and
determining the effect of said agent on HX2004-6 expression.

20. The method of claim 19, wherein said determining is carried out by measuring an amount of an HX2004-6 mRNA in the cell.

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21. The method of claim 19, wherein said determining is carried out by measuring an amount of an HX2004-6 polypeptide in the cell.